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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,820	10/27/2003	Shinichi Kojima		9668

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ALEXANDRIA, VA 22314

EXAMINER

SONG, HOON K

ART UNIT PAPER NUMBER

2882

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,820

Applicant(s)

KOJIMA ET AL.

Examiner

Hoon Song

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/19/05
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29, 30 and 32-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29, 30 and 32-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/098,593.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/28/2005</u> <u>11/17/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 35-42 are objected to because of the following informalities:

Claims 35-42 are directly or indirectly dependents on a canceled claim 28.

In claim 32 at line 9, "text subject" should read --test subject--.

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 29-30 and 32-50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-33 of copending Application No. 10/253492. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are anticipated by the claims of the patent as follows:

Regarding claims 29 and 35, the application claims a radiological imaging apparatus comprises:

a bed for carrying a test subject; and
an image pickup apparatus.
wherein said image pickup apparatus comprise;
a radiation detector ring structure that detects radiation from said test subject and includes a plurality of radiation detectors arranged around said bed in a ring form;
an X-ray source that irradiates said test subject with X-rays;
a first X-ray source transfer apparatus that transfers said X-ray source in the circumferential direction of said radiation detector ring structure; and
a second X-ray source transfer apparatus that transfers said X-ray source inside said radiation detector ring structure in an axial direction of said radiation detector ring structure (see claim 26).

Regarding claim 30, the application claims said x-ray source moves in a circumferential direction of said radiation detector ring structure inside said radiation detector ring structure (see claim 26).

Regarding claims 32 and 33, the application claims a radiological apparatus comprises:

A bed for carrying a test subject; and
An image pickup apparatus,
Wherein said image pickup apparatus comprises:
A radiation detector ring structure that detects radiation from said test subject and includes a plurality of radiation detectors arranged around said bed in a ring from;
An x-ray source that irradiates said test subject with x-rays; and

An x-ray source transfer apparatus that transfers said x-ray source outside said radiation detector ring structure in the circumferential direction of said radiation detector ring structure,

Wherein said x-ray source is placed outside said radiation detector ring structure in a direction of a radius of said radiation detector ring structure, and a slit that lets x-rays radiated from said x-ray source pass through toward the inside of said radiation detector ring structure is formed between said radiation detectors of said radiation detector ring structure (see claim 20).

Regarding claims 34 and 38, the application claims a collimator (the ring structure having the slit considered to be a collimator) through which said x-ray pass is placed between said slit and said radiation detectors and said radiation detectors are placed around said collimator (see claim 20).

Regarding claims 37 and 43, the application claims a radiological imaging apparatus comprises:

A bed for carrying a test subject; and

An image pickup apparatus,

Wherein said image pickup apparatus comprises:

A rotatable radiation detector ring structure that detects radiation from said test subject and includes a plurality of radiation detectors arranged around a bed in a ring form;

An x-ray source that rotates together with said radiation detector ring structure and irradiates said test subject with x-rays,

An x-ray source transfer apparatus that is provided on said radiation detector ring structure and transfers said x-ray source in an axial direction of said radiation detector ring structure (see claim 26).

Regarding claims 44 and 36, the application claims said radiation detector is a semiconductor radiation detector (see claim 31).

Regarding claims 40-41 and 45-47, the application claims said radiation detector outputs a first detector outputs a first detection signal which is a detection signal of said x-rays which is one type of said radiation that have passed through said test subject and a second detection signal which is a detection signal of gamma rays which is another type of said radiation radiated from said test subject (see claim 26).

Regarding claims 39, 42, 48 and 50, the application claims a section image data creation apparatus that creates a first sectional image data of said subject on the basis of said x-ray detection signal and a second sectional image data of said subject on the basis of said gamma ray detection signal and creates a combined sectional image data obtained by combining said first and second sectional image data (see claim 32).

Regarding claim 49, the application claims each of said radiation detectors outputs an x-ray detection signal which is one of said radiation and a gamma ray detection signal which is the other one of said radiation (see claim 26).

Claims 32-33 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-33 of copending Application No. 10/246450. Although the conflicting claims are not identical,

they are not patentably distinct from each other because the instant claims are anticipated by the claims of the patent as follows:

Regarding claims 32 and 33, the application claims a radiological apparatus comprises:

A bed for carrying a test subject; and

An image pickup apparatus,

Wherein said image pickup apparatus comprises:

A radiation detector ring structure that detects radiation from said test subject and includes a plurality of radiation detectors arranged around said bed in a ring from;

An x-ray source that irradiates said test subject with x-rays; and

An x-ray source transfer apparatus that transfers said x-ray source outside said radiation detector ring structure in the circumferential direction of said radiation detector ring structure,

Wherein said x-ray source is placed outside said radiation detector ring structure in a direction of a radius of said radiation detector ring structure, and a slit that lets x-rays radiated from said x-ray source pass through toward the inside of said radiation detector ring structure is formed between said radiation detectors of said radiation detector ring structure (see claims 16 and 19).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments with respect to claims 29-30 and 32-50 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon Song whose telephone number is (571) 272-2494. The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272 - 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2882

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HKS

5/19/05
HKS



DAVID V. BRUCE
PRIMARY EXAMINER